



COLLABORATIVE PROJECT AGREEMENT

BETWEEN:

Beijing SHRIMP Center (BJ SHRIMP)

Institute of Geology, Chinese Academy of Geological Sciences (“IGCAGS”)

AND:

Shahrood University of Technology (“SUT”)

By this Cooperation Agreement, the parties hereto, (i) the Beijing SHRIMP Center (referred to as **BJ SHRIMP** hereafter), Institute of Geology, Chinese Academy of Geological Sciences (referred to as **IGCAGS** hereafter) herein represented by Professor **Zengqian Hou**, (ii) Shahrood University of Technology (referred to as **SUT** hereafter), herein represented by its President, Professor **Mohamad Mehdi Fateh**, mutually agreed to conduct as follows:

1. OBJECTIVES

This is a project agreement between **Shahrood University of Technology (“SUT”)** and **Institute of Geology, Chinese Academy of Geological Sciences (“IGCAGS”)** in what could possibly develop as a multi-year commitment to examine the benefits of, and options to achieve:

- a) exchange of geologists;
- b) share data, knowledge and resources within the context of a defined and limited project designed to meet respective business needs; and
- c) undertake collaborative project “Research and development of small domain *in-situ* isotopic analytical methodology on minerals and its application demonstrations” and its related geoscience activities including field investigations and laboratory measurements on ophiolites, igneous and metamorphic rocks and mineral deposits in the Iranian segment of the Tethys.



2. GOALS AND FORMS OF CO-OPERATION

Both parties agree to carry out the cooperation within the following overall scientific goals:

- a) Research & development of small domain *in-situ* isotopic analytical methodology on minerals by using SHRIMP II and SHRIMP IIe-MC.
- b) The application demonstrations of methodologies developed with above-mentioned instruments on the studies of major ophiolites, igneous and metamorphic rocks (especially for Neoproterozoic complexes) and typical porphyry-type copper deposits, including ophiolites in the Sabzevar Belt and ultramafic-mafic complex (komatiites) of Mashhad in the north of Iran, ophiolites of central and south of Iran, Igneous and metamorphic complexes in central Iran and/or the Sar-Cheshmeh porphyry-type Cu deposit in Urumiyeh-Dokhtar Magmatic Belt in Central Iran.
- c) Jointly establish the SHRIMP Remote Operation System (SROS) in SUT, and make it available for performing SHRIMP measurements remotely.
- d) In addition on the project here proposed, either party may propose additional specific projects in terms of teaching, personnel training, research, and exchange of information and publications and community services to be conducted by both parties.

3. TERM OF VALIDITY

This Agreement shall remain effective for a 3-year period of time after the date on which it is signed by both parties.

4. OBLIGATION OF BEIJING SHRIMP CENTER

- 4.1 To put the SHRIMP lab of the BJ SHRIMP, IGCAGS available to provide instruments, facilities and technical supports for all the projects that will be developed within this Agreement.
- 4.2 A 2-day-free SHRIMP machine time per year will be offered to SUT by BJ SHRIMP for cooperative methodology development, within the effective term of this Agreement.
- 4.3 To send experts and help SUT set up SROS workstation and put the workstation available for remote dating on mineral samples with the SHRIMP II located in Beijing SHRIMP Center, Institute of Geology, CAGS.



- 4.4 Accept up to 2 persons from SUT to visit Beijing SHRIMP Center for a period of 5 days per year to conduct cooperative research work, within the effective term of 3 years of this Agreement.

5. OBLIGATIONS OF SHAHROOD UNIVERSITY OF TECHNOLOGY

- 5.1 To provide the BJ SHRIMP scientists with well-informed local guide(s) necessary for the field investigations to be conducted in Iran.
- 5.2 To provide the BJ SHRIMP scientists with logistics necessary for the field investigations to be conducted in Iran, including vehicles, accommodations and camping facilities.
- 5.3 To provide the BJ SHRIMP scientists with detailed geological materials necessary for the academic research under this Agreement, such as geological map, topographic map, available geological data and regional geological information.
- 5.4 Altogether 3 field investigations will be conducted in Iran jointly by the BJ SHRIMP and the SUT scientists during the effective period of this Agreement, namely, once a year.
- 5.5 To provide necessary equipments and conditions for SROS workstation, including two sets of desktop computers with internet access, a separate room for establishing the workstation, and at least one staff member working as the administrator of the workstation.

6. FUNDING

To cover all expenses of the scientific projects, each party will be responsible to obtain funds from research agencies or universities and research institutions. The BJ SHRIMP will cover the costs of international travel for its own personnel, accommodation and per-diem as well as local transportation, and the accommodation for the geologists from the SUT who participate in the field excursion in Iran, within the effective term of this Agreement. The SUT should be responsible for international travel fare and all expenses of its own staff for conducting cooperative work in China, within the effective term of 3 years of this Agreement.

7. ASSESSMENT INDEX

- 7.1 To accomplish 3 joint field investigations in Iran by BJ SHRIMP and SUT scientists during the effective period of this Agreement.



- 7.2 To accomplish 6 days SHRIMP measurements on Iranian samples for the cooperative research covered by this Agreement.
- 7.3 Both Iranian and Chinese scientists publish at least 2 research papers (at least 1 paper from each party) in international scientific journal(s) based on the fruit of the cooperative research covered by this Agreement.
- 7.4 To make 2 persons from SUT master the methods of SHRIMP U-Pb dating and SIMS measurements on minerals.

8. CO- ORDINATION

- 8.1 For the purpose of co-ordinating the activities to be conducted under this Agreement, BJ SHRIMP appoints Prof. Yuruo Shi and SUT appoints Prof. Habibollah Ghasemi as coordinators for the parties of their own.
- 8.2 It shall be incumbent on the Technical and Administrative Co-ordination to settle and forward all and any academic and administrative issues that may arise during the effective term hereof, as well as to supervise the activities provided for in the Work Plan.

9. INTELLECTUAL PROPERTY

- 9.1 Intellectual Property ("IP") arising from cooperative research covered by this Agreement will be the mutual property of both parties. The other party may be granted certain non-exclusive, non-transferable, royalty free licensing rights to use the IP for internal research and education purposes.
This Agreement does not affect the ownership of the rights of Background IP.
- 9.2 Each party must use all reasonable endeavours to protect the IP within its possession and the IP of the other party from damage, loss, theft, alteration or disclosure, and unauthorised use.
- 9.3 For the purposes of this Agreement IP includes, all copyright, patent rights, all trademarks, designs, circuit layouts, and software program segments resulting from intellectual activity in any field. For the purposes of this Agreement "Background IP" means any IP that is created or developed by a party independently.



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19 December 2017

10. PUBLICATIONS

The first results of this project are common properties of Chinese and Iranian research participants and will be published as joint scientific papers. The first author will be the person who produced the major data.

11. TERMINATION

- 11.1 This Agreement may be terminated at any time, by any party, upon a 30-day prior written notice to the other party.
- 11.2 If upon termination any commitment or any work in course has not been met or completed, the parties shall define, under a Termination Instrument, the liabilities and obligations for the completion or cessation of the projects in progress and any other outstanding liabilities, and shall ensure that work in progress shall be completed, notwithstanding termination.



INSTITUTE OF GEOLOGY, CAGS



SHAHROOD UNIVERSITY OF TECHNOLOGY
19 December 2017

Signed by:

Prof. Zengqian Hou

Signature:

Director

Prof. Yuruo Shi

Signature:

Coordinator of BJ SHRIMP

Institute of Geology,
Chinese Academy of Geological Sciences

Stamp:

Date:



2018.3.20.

Signed by:

Prof. Mohamad Mehdi Fateh

Signature:

President

Prof. Habibollah Ghasemi

Signature:

Coordinator of SUT

Shahrood University of Technology

Stamp:

Date:

